
PHASE I ENVIRONMENTAL SITE ASSESSMENT

TELEGRAPH HILL SCORIA PIT (TRACT 37) ST. PAUL ISLAND, ALASKA



Prepared by



National Oceanic and Atmospheric Administration
7600 Sand Point Way NE
Seattle, Washington 98115

October 20, 2005

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EXECUTIVE SUMMARY

The National Oceanic and Atmospheric Administration (NOAA) chose to prepare a Phase I Environmental Site Assessment (ESA) for the Telegraph Hill Quarry on St. Paul Island, Alaska (Township 35 South, Range 132 West, Section 13, of the Seward Meridian, Alaska as shown on the plat of rectangular survey officially filed May 14, 1986; Tract 42; 14.16 Acres; 1976 MOU: Parcel 14; 1984 Transfer of Property Agreement (TOPA): Site 4). The Phase I ESA was conducted in accordance with American Society for Testing and Materials (ASTM) Practice E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM 2000).

The results of this investigation represent a review of current conditions based on available information and limited observations. NOAA also performed a detailed review of historic records available from Federal and State databases, and obtained historic records information from the current property owner, NOAA.

The first known use of the subject property was by DOD and other island entities, beginning in the 1940s as an oil drum, waste oil, and debris disposal site. The U.S. Army established a radio station atop Telegraph Hill in 1943 and supposedly established by 1942 a telegraph station facility that included detonation controls for command detonation of the village facilities, structures, and buildings in the event of an Imperial Japanese armed forces invasion of St. Paul Island. The only other known use of the property has been as a quarry for mining scoriaceous gravel. NOAA determined the following conditions at the subject property:

- The property is used as a quarry for mining scoriaceous gravel, with no structures, electrical equipment containing PCBs, stored chemicals, or signs of chemical releases observed during the May 10, 2005 inspection.
- NOAA and DOD removed debris from the subject property from the 1980s into the 2000s, with NOAA purportedly removing a soil hotspot containing DRO.
- NOAA investigated groundwater at and near the subject property but found no contaminants above their ADEC Table C cleanup levels.
- ADEC considers NOAA's debris and contamination site at the subject property closed.

The Phase I ESA was conducted based on site boundaries recognized by NOAA as of May 10, 2005. This assessment has not revealed evidence of recognized environmental conditions in connection with the property. NOAA staff recommends property transfer under the TOPA.

SECTION 1 INTRODUCTION

The National Oceanic and Atmospheric Administration (NOAA) chose to prepare a Phase I Environmental Site Assessment (ESA) for the Telegraph Hill Quarry on St. Paul Island, Alaska (Township 35 South, Range 132 West, Section 13, of the Seward Meridian, Alaska as shown on the plat of rectangular survey officially filed May 14, 1986; Tract 37; 14.16 Acres; 1976 MOU: Parcel 14; 1984 Transfer of Property Agreement (TOPA): Site 4). The Phase I ESA was conducted in accordance with American Society for Testing and Materials (ASTM) Practice E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM 2000).

1.1 SCOPE OF WORK

The scope of the Phase I ESA was to identify potential areas of environmental concern associated with the subject property. It is noted that the scope is limited to the NOAA-owned portion of the Telegraph Hill Quarry, fully within Tract 37; this quarry extends into adjacent property owned by the Tanadgusix Corporation (TDX). Resources that NOAA used in conducting the Phase I ESA included ASTM Practice E1527-00, public documents, Federal and State database access, visual inspection of the subject and surrounding properties, and interviews with persons knowledgeable about historic activities at the subject property.

This Phase I ESA is based on available information pertinent to the subject property and results of a walk-through site inspection. Where potential areas of environmental concern are identified, this report will recommend methods for obtaining confirmatory evidence of these concerns, including additional research, investigation, or collecting soil, sediment, surface water, or groundwater samples. In addition, the scopes of Phase I ESA's do not include an evaluation of lead-based paint (LBP) or asbestos-containing building materials (ACBM) based on ASTM Practice E-1527-00. While both LBP and ACBM surveys would have been performed separate from but concurrent with this Phase I ESA, no buildings are associated with the subject property thus no building inspections were necessary.

1.2 PURPOSE

The purpose of this Phase I ESA is to identify whether recognized environmental conditions are present on the subject property, to enable NOAA to disclose all environmental conditions on the property prior to its transfer under TOPA.

Recognized environmental conditions are defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a historic release, or material threat of release of any hazardous substance or petroleum product into structures on the property or to the ground surface, subsurface soil, groundwater, or surface water of the subject or adjacent properties. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.3 INVOLVED PARTIES

NOAA, the trustee for the subject property, performed the Phase I ESA. NOAA files were reviewed regarding the environmental condition of the subject property. The Alaska Department of Environmental Conservation (ADEC) online Contaminated Sites Database (CSD) was reviewed with regard to state environmental records for the subject property (ADEC 2005), as well as other potential contaminated sites on St. Paul Island.

SECTION 2

PROPERTY DESCRIPTION

The following sections describe the subject property and adjacent properties as observed by NOAA personnel during the May 10, 2005 site inspection and upon review of applicable maps and records. Figure 1 depicts the geographical location of the site, and Figure 2 provides detail of the subject property. Photographic documentation of the field inspection is presented in Appendix A.

2.1 LOCATION

St. Paul Island is part of the Pribilof Islands, a small island archipelago located in the Bering Sea approximately 800 miles west-southwest of Anchorage and 300 miles north-northwest of Dutch Harbor, Alaska. The subject property is located on the northwest slopes of Telegraph Hill in the southcentral portion of St. Paul Island, north of the City of St. Paul and southwest of the St. Paul Airport (Figure 2), and occupies Tract 37, all within Township 35 South, Range 132 West, Section 13, of the Seward Meridian, Alaska as shown on the plat of rectangular survey officially filed May 14, 1986. Coordinates for the subject property are latitude 57°09'09.29" North and longitude 170°16'17.22" West.

2.2 PHYSICAL SETTING

St. Paul Island covers approximately 44 square miles and was created as the result of volcanic activity. The climate of the island is classified as subpolar, with weather conditions heavily influenced by the Bering Sea. Vegetation on the island is broadly classified as moist tundra. St. Paul Island is also well known for wildlife, including fur seals, northern (Steller) sea lions, harbor seals, reindeer, and numerous bird species.

The subject property is 14.13 acres in size and contains a volcanic scoria quarry. The subject property has a varied grade due to its location on a hill side, as well as quarry activities.

A total of six public drinking water wells used to supply water for the City of St. Paul are located near the subject property, with one well within 1,000 feet of the northeast portion of the subject property's boundary. Two additional public drinking water wells are located approximately 2,500 feet southeast of

the subject property, though it is unclear whether these wells are active. A total of five active groundwater monitoring wells are located on or near the subject property (Figure 3). .

SECTION 3 HISTORIC REVIEW

During a Phase I ESA, several types of records commonly are reviewed to evaluate the subject property's historic uses. Often, sources of valuable historic use data include city directories, SanbornTM fire insurance maps, and aerial photographs. Because these types of information are limited in rural Alaska, interviews with knowledgeable persons familiar with historic site activities were relied upon to supplement available records pertaining to the subject property.

The following sections summarize city directory listings for the subject property, historical photographs, and other general information obtained during the Phase I ESA process.

3.1 CITY DIRECTORIES

No city directories were available for the subject property.

3.2 SANBORNTM FIRE INSURANCE MAPS

No SanbornTM Fire Insurance Map coverage was available for any property on St. Paul Island, including the subject property.

3.3 HISTORICAL MAPS AND PHOTOGRAPHS

Historical maps and photographs, including aerial photographs, were obtained from records compiled from NOAA's files. Historical maps and photographs of the subject property were reviewed for the years 1918 through 2002, though only three photographs of the subject property was located. A copy of the historical photographs are included in Appendix A. Results of the historical map and photograph review are as follows:

- **2001.** This IKONOS satellite photograph shows the subject property similar to its current physical condition. No features of interest are apparent.

-
- **2000.** This Aeromap aerial photograph shows the subject property at roughly the same state as the 2001 IKONOS satellite image. No features of interest are apparent.
 - **1993.** This U.S. Geological Survey Quadrangle aerial photograph shows the subject property at roughly the same state as the 2001 IKONOS satellite image. No features of interest are apparent.

3.4 GENERAL

Telegraph Hill purportedly received its name from the establishment of a military telegraph station atop its summit. This telegraph station was supposedly the same facility where detonation controls were established in 1942 by the U.S. Army for command detonation of the village facilities, structures, and buildings in the event of an Imperial Japanese armed forces invasion of St. Paul Island. The U.S. Army established a radio station at the top of Telegraph Hill in 1943 (Lindsay 2003). Beginning in the 1940s, DOD and other island entities used Telegraph Hill, including the subject property, as an oil drum, waste oil, and debris disposal site. Under the FUDS Program, DOD identified this site as FUDS C in 1985 (DOD 1985). Under its Two-Party Agreement (TPA [1996]) with the State of Alaska Department of Environmental Conservation, NOAA refers to the portions of Telegraph Hill potentially impacted by debris and/or contamination by past NOAA (and its predecessor agencies such as the Bureau of Commercial Fisheries) activities as TPA Site 15a. TPA Site 15a is located within and near the subject property. Currently, as well as historically, Telegraph Hill including the subject property is actively mined for scoriaceous gravel used by various on-island entities as road base and for other purposes.

Previous investigation and activities conducted at and adjacent to the subject property include the 1986 debris removal by Chase Construction, Inc. (Chase); 1992 preliminary assessment by Ecology and Environment, Inc. (E&E); 1997 debris removal by Aleutian Enterprises; 1999 closure confirmation by Tetra Tech; and 2000 debris removal and soil and groundwater sampling (site closure) by Nortech. Debris removal included over 4,000 drums, abandoned heavy equipment, and other metallic debris. Contaminated soil removal was limited to a purported hot spot removal about Tetra Tech sample location sample 15SS01. This sample was collected from an area exhibiting significant oil staining near the top of the active quarry, along the site's southern property line and contained 410 milligrams per kilogram (mg/kg) of diesel-range organics (DRO). No confirmation sample results were available for the purported removal, however a subsequent sample collected less than 6 feet from 15SS01 contained no DRO contamination above its ADEC Method Two cleanup level of 250 mg/kg (NOAA 2004).

IT Alaska, Inc. (IT) and Columbia Environmental Sciences, Inc. (CESI) conducted groundwater monitoring of five monitoring wells in 2000 and 2001. Samples were analyzed for petroleum hydrocarbons, metals, volatile and semivolatile organic compounds, VOCs, SVOCs, PCBs, and pesticides. No samples contained these contaminants above their ADEC Table C groundwater cleanup levels (IT 2002).

ADEC considers TPA Site 15a closed (ADEC 2005).

SECTION 4

SITE RECONNAISSANCE

During the Phase I ESA process, a site reconnaissance is conducted, and due diligence is exercised in identifying potential areas of environmental concern. The site reconnaissance focuses on evaluating the current disposition of the subject property and adjacent properties, interior storage and waste disposal areas, interior discharges, exterior storage and waste disposal areas, exterior discharges, storage tanks, and polychlorinated biphenyls (PCBs).

NOAA personnel performed the field inspection of the subject property on May 10, 2005.

4.1 CURRENT DISPOSITION OF SUBJECT PROPERTY

Purpose and Scope: During a Phase I ESA, the subject property is inspected to evaluate the general condition of the buildings and structures. General observations are made about the buildings and structures on the subject property, as well as their location, size, and apparent usage. Construction features, such as ceilings and floors, are noted, as is the presence and type(s) of light fixtures and electrical equipment. Also noted are other features and anomalies that may contribute to environmental contamination. Topography, vegetation, and proximity to thoroughfares and waterways also are observed during the inspection.

Observations: The subject property is currently a quarry. The only anthropogenic (“man-made”) features of the subject property are the quarry with isolated metallic debris, one groundwater monitoring well within the property boundary, and unpaved access roads. Photographs documenting the inspection can be found in Appendix A.

4.2 CURRENT DISPOSITION OF ADJACENT PROPERTIES

Purpose and Scope: During a Phase I ESA, properties adjacent to the subject property are inspected for signs or conditions that could pose significant potential for environmental contamination on the subject property due to lateral migration of surface or subsurface contaminants from those properties. The review of adjacent properties is limited as recommended by ASTM Practice E-1527-00, and information relating

to those properties provided herein should not be interpreted as comprehensive or conclusive, unless otherwise noted.

Observations: The subject property is fully surrounded by property owned by TDX, including additional quarry areas actively mined by TDX. The City of St. Paul operates a drinking water wellfield near the subject property.

4.3 INTERIOR STORAGE AND WASTE DISPOSAL AREAS

Purpose and Scope: During a Phase I ESA, interior storage areas are examined for staining or other evidence of former activities that could present a potential for environmental contamination. Containers of chemicals are examined for content and usage, and trash or rubbish accumulation is noted. In addition, designated interior disposal areas and areas conducive to waste disposal are examined for evidence of improper disposal. Finally, restrooms, drains, exterior doors, and secluded closets are visually inspected.

Observations: The subject property has no containers of chemicals.

4.4 INTERIOR DISCHARGES

Purpose and Scope: During a Phase I ESA, interior discharge areas, such as drainage areas, pipe discharges, sumps, and air emission generators, are visually examined for leakage or other evidence of potential environmental contamination.

Observations: The subject property has no structures, thus no potential for interior discharges.

4.5 EXTERIOR STORAGE AND WASTE DISPOSAL AREAS

Purpose and Scope: During a Phase I ESA, exterior storage and waste disposal areas are visually inspected for signs of releases or other environmental contamination associated with historic activities. Visual and olfactory evidence of chemical or other release are noted at designated storage areas and locations suggestive of storage operations such as concrete or asphalt pads, covered or fenced areas, pits, ponds, and lagoons.

In addition, exterior waste disposal areas are examined, including garbage cans and dumpsters. Areas of stained or off-color soil, stressed vegetation, discarded empty containers, and burned residue are inspected, as are remote or obscured areas of the property conducive to dumping.

Observations: The subject property has no exterior storage, but does have isolated locations with metallic debris that may constitute waste disposal areas.

4.6 EXTERIOR DISCHARGES

Purpose and Scope: During a Phase I ESA, exterior subsurface structures are inspected for evidence of leaks, releases, or other environmental contamination associated with historic activities. The presence of subsurface structures that collect or contain liquid and sediment may represent a source of potential environmental contamination. Areas that are inspected if present include underground voids and vaults, drains, sumps, oil/water separators, wells, pits, ponds, lagoons, and aboveground structures indicating subsurface activity.

Observations: There are no indications of exterior discharges at the subject property.

4.7 STORAGE TANKS

Purpose and Scope: The presence of current and historic aboveground storage tanks (AST) and underground storage tanks (UST) at the subject property is carefully evaluated during a Phase I ESA. Storage tanks are recognized as major potential sources of environmental contamination. Contamination of soil and/or groundwater may occur as a result of spills, overfills, or releases from tank systems. Such contamination would require remediation, and the property owner or operator could be responsible for remediation costs.

Observations: No storage tanks, thus no signs of spills, overfills, or releases, were evident.

4.8 POLYCHLORINATED BIPHENYLS

Purpose and Scope: The subject property was inspected for items that potentially may contain PCBs such as transformers and other electrical equipment.

Observations: No equipment suspected to contain PCBs was identified at the subject property during the site reconnaissance.

SECTION 5

REGULATORY RECORDS REVIEW

A regulatory records review was conducted through phone interviews with regulatory officials and by consulting available databases provided by the U.S. Environmental Protection Agency and ADEC. According to interviews, the subject property is not part of any regulatory action. Databases that were searched include the following.

Federal Records

- **Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS):** CERCLIS contains data on potentially hazardous waste sites that have been reported to the EPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites that are either proposed to or on the National Priorities List (NPL) and sites that are in the screening and assessment phase for possible inclusion in the NPL.
- **NPL:** The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the federal Superfund program.
- **Delisted NPL:** The National Oil and Hazardous Substances Pollution and Contingency Plan establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.
- **Resource Conservation and Recovery Information System (RCRIS):** RCRIS includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA.

State of Alaska Records

- **Contaminated Sites Database:** The Contaminated Sites Database (CSCSL) is the State equivalent to CERCLIS. Sites contained in the CSCSL may or may not already be listed on the Federal CERCLIS list.

The subject property was only listed in the CSCSL database (Reckey Number 1994250135420). CSCSL indicates the subject property's regulatory status as Closed (ADEC 2005). The database entry included the following summary:

“The monitoring results are suspect at 1.5 mg/L RRO due to it being detected in the method blank, the nature of RRO not easily being dissolved in groundwater and earlier sampling results not showing RRO to be an issue, the Department will not be requiring groundwater monitoring for the site. The Department’s determination for no further remedial action at TPA 15 Telegraph Hill is equivalent to Section 59 of the Two-Party Agreement “Closure of Sites of Operable Units” 59. At any time while this Agreement is in effect, NOAA may request from ADEC written confirmation that all corrective action has been completed at a site(s) or operable unit(s) in accordance with this Agreement. Within thirty (30) days of its receipt of such request. ADEC shall: (1) provide written confirmation that no further corrective action is required at the subject site(s) or operable unit(s); or (2) deny such request and provide a written explanation of the technical basis on which the request is denied. ADEC shall not deny certification that corrective action is complete at any site(s) or operable unit(s) solely on the basis that post-remedial measures, such as monitoring, shall remain in place for a period of months or years.”

A review was conducted of available ADEC records for active listed sites within 0.25 mile of the subject property and for active sites with groundwater contamination located within 1 mile of the subject property. Results of the ADEC’s CSCSL review indicate no sites meet the criteria above, and no facilities within 1 mile of the subject property were listed in the federal RCRIS database.

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

The results of this Phase I ESA represent a review of current conditions, based on available information and limited observations, as described in previous sections of this report.

The first known use of the subject property was by DOD and other island entities, beginning in the 1940s as an oil drum, waste oil, and debris disposal site. The U.S. Army established a radio station atop Telegraph Hill in 1943 and supposedly established by 1942 a telegraph station facility that included detonation controls for command detonation of the village facilities, structures, and buildings in the event of an Imperial Japanese armed forces invasion of St. Paul Island. The only other known use of the property has been as a quarry for mining scoriaceous gravel. NOAA and DOD removed debris from the subject property from the 1980s into the 2000s, with NOAA purportedly removing a soil hotspot containing DRO. NOAA investigated groundwater at and near the subject property but found no contaminants above their ADEC Table C cleanup levels. ADEC considers TPA Site 15a, NOAA's debris and contamination site at the subject property, closed. No other activities are known to have occurred on the subject property. No structures are present at the subject property. No electrical equipment containing PCBs was identified during the site inspection activities. No stored chemicals were observed at the subject property, nor were signs of chemical releases observed.

NOAA performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-00 of Township 35 South, Range 132 West, Section 13, of the Seward Meridian, Alaska as shown on the plat of rectangular survey officially filed May 14, 1986; Tract 37; 14.16 Acres; 1976 MOU: Parcel 14; 1984 Transfer of Property Agreement (TOPA): Site 4. The Phase I ESA was conducted based on site boundaries recognized by NOAA as of May 10, 2005. This assessment has not revealed evidence of recognized environmental conditions in connection with the property. NOAA staff recommends property transfer under the TOPA.

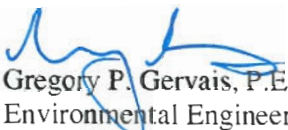
SECTION 7 LIMITATIONS

This report was compiled based partially on information supplied to NOAA from outside sources and other information in the public domain. The conclusions and recommendations herein are based on the information NOAA obtained in compiling the report. This information is on file at NOAA's office in Seattle, Washington. NOAA makes no warranty as to the accuracy of statements made by others, which may be contained in the report, nor are any other warranties or guarantees, expressed or implied, included or intended by the report except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professionals performing the same or similar services.

Because the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. NOAA personnel performing and reviewing this Phase I ESA do not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of obligations under Federal, State, or local laws or any modifications or changes to such laws. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature but shall be a representation of findings of fact from records examined.

The depth of this investigation is confined to the above-listed scope of work. Hazardous materials or coatings may be buried beneath the ground surface or concealed in an otherwise undetectable manner. NOAA has exercised due diligence in the conduct of this Phase I ESA but makes no warranty regarding the presence or absence of concealed features that could not be documented at the time the Phase I ESA was conducted.


Prepared by:



Gregory P. Gervais, P.E.
Environmental Engineer

National Oceanic and Atmospheric Administration

Reviewed by:

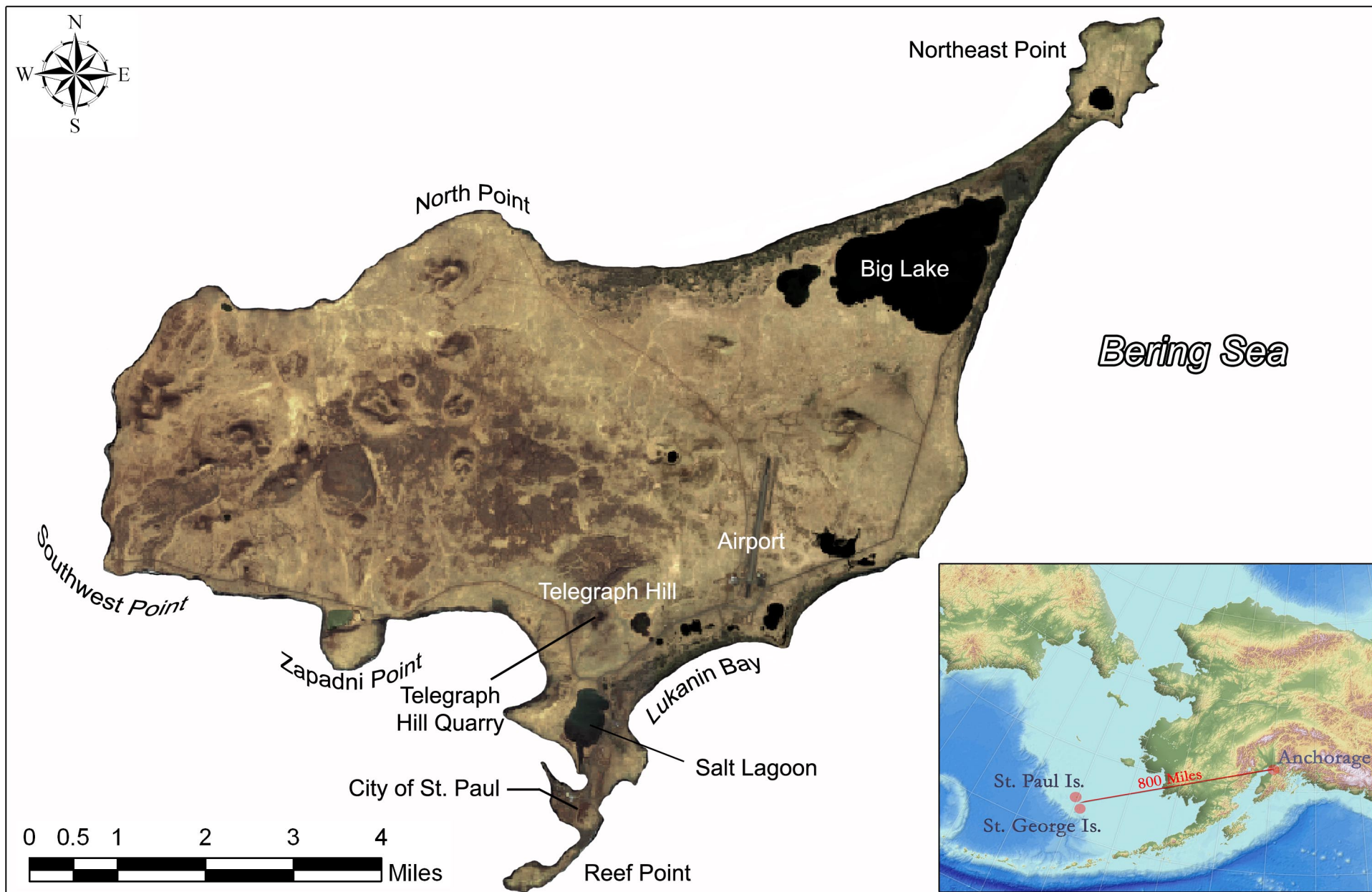


Thanh Minh Trinh, P.E.
Environmental Compliance Officer

National Oceanic and Atmospheric Administration

SECTION 8 REFERENCES

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- U.S. EPA. 2005b. National Priorities List Database. (<http://oaspub.epa.gov/oerrpage/basicqry>). On-Line Service Accessed on May 31, 2005.
- U.S. EPA. 2005c. Resource Conservation and Recovery Information System Database. (http://www.epa.gov/enviro/html/rcris/rcris_query_java.html). On-Line Service Accessed on May 30, 2005.



Figure

1

St. Paul Island and Vicinity of Subject Property
Telegraph Hill Quarry
St. Paul Island, Alaska

Source: Ikonos Satellite
Imagery, 2001





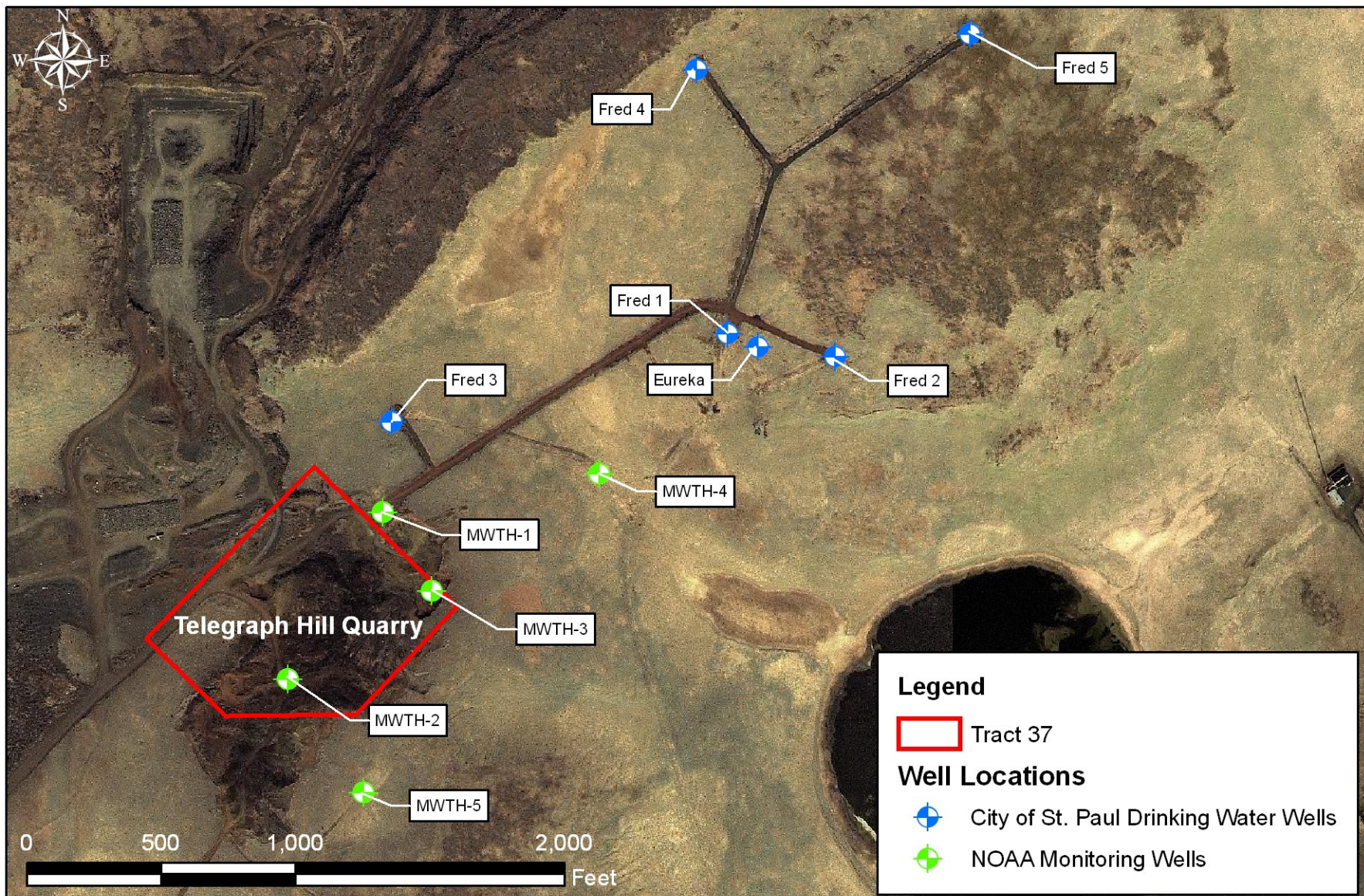
Figure

2

Subject Property
Telegraph Hill Quarry
St. Paul Island, Alaska

Sources: Tract 37 Boundary
(BLM MTPs 1983), Satellite
Imagery (Ikonos 2001).





Figure

3

Drinking Water and Monitoring Wells
in the Vicinity of the Subject Property
Telegraph Hill Quarry
St. Paul Island, Alaska

Sources: Tract 37 Boundary
(BLM MTPs 1983), Well
Locations (NOAA GIS 2005),
Satellite Imagery (Ikonos 2001).



APPENDIX A

SITE RECONNAISSANCE PHOTOGRAPHS
and
HISTORICAL PHOTOGRAPHS

Telegraph Hill Quarry (Tract 37)

St. Paul Island, Alaska



Photo 1. Telegraph Hill Quarry (Tract 37). Looking From Western side of subject property to North. NOAA. May 2005.



Photo 2. Telegraph Hill Quarry (Tract 37). Looking From Central portion of subject property to Northwest. NOAA. May 2005.

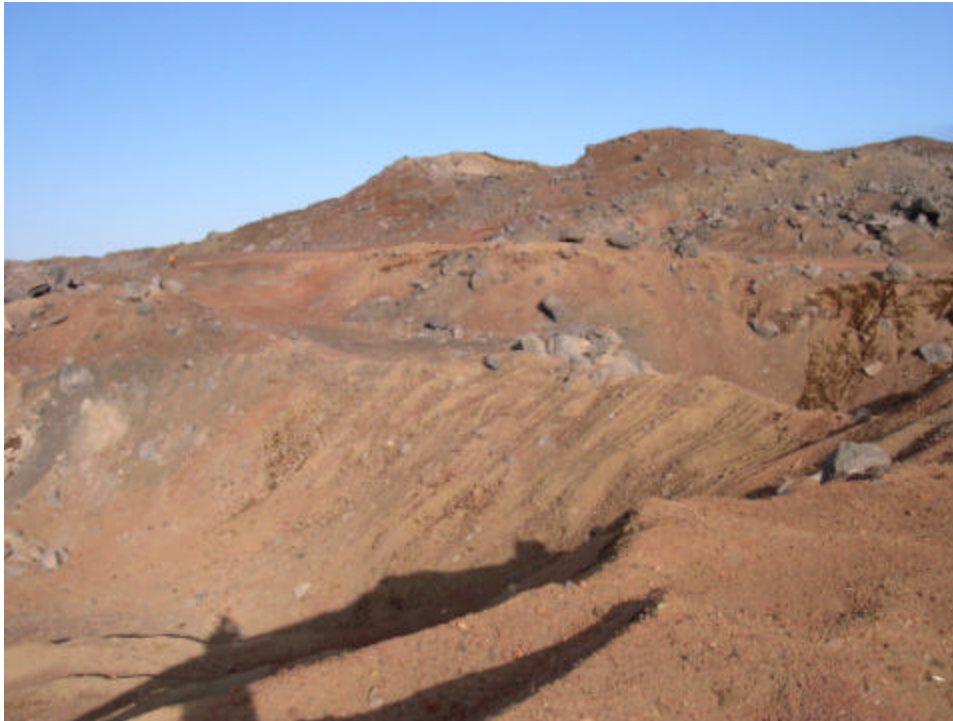


Photo 3. Telegraph Hill Quarry (Tract 37). Looking From Southern portion of subject property to Southeast. NOAA. May 2005.



Photo 4. Telegraph Hill Quarry (Tract 37). Looking Central portion of subject property to Southeast. NOAA. May 2005.



Photo 5 Telegraph Hill Quarry (Tract 37). Quadrangle Aerial Photograph. Note Image is Oriented with Due North at 12 O'Clock. U.S. Geological Survey. 1993.



Photo 6. Telegraph Hill Quarry (Tract 37). IKONOS Satellite Image. Note Image is Oriented with Due North at 12 O'Clock. Space Imaging, Inc. 2001.

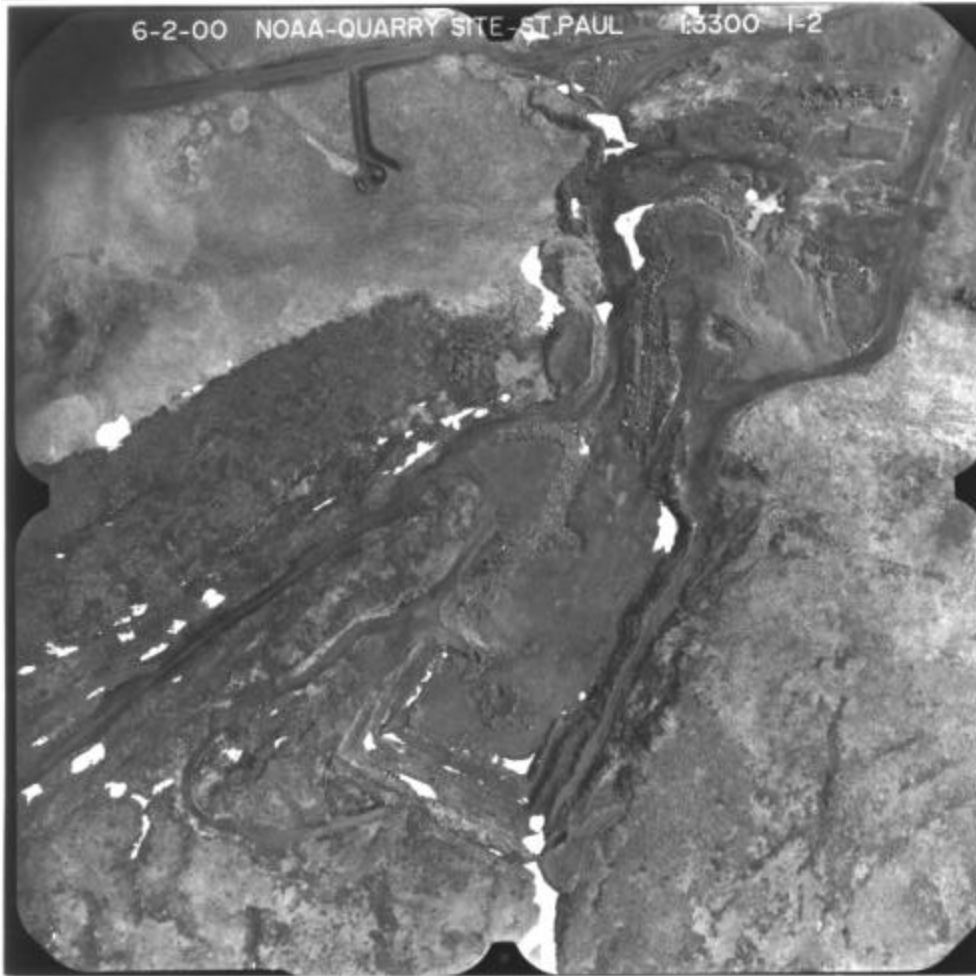


Photo 7. Telegraph Hill Quarry (Tract 37). Aerial Photograph. Note Image is Oriented with Due North at 9 O'Clock. Aeromap. 2000.

APPENDIX B
INSPECTOR STATEMENT OF QUALIFICATIONS

Telegraph Hill Quarry (Tract 37)

St. Paul Island, Alaska

NOAA INSPECTOR AND ASSISTANT QUALIFICATIONS

GREG GERVAIS, P.E.

National Oceanic and Atmospheric Administration

Environmental Engineer

Greg Gervais is an environmental engineer with over 10 years of experience designing and implementing characterizations and cleanups for hazardous, toxic, and radioactive waste (HTRW) sites. Greg has worked for NOAA's Office of Response and Restoration since 2002, functioning both as a senior environmental engineer and deputy manager for the Pribilof Project Office.

Prior to NOAA, Greg was a project manager and senior chemical engineer for the U.S. Army Corps of Engineers HTRW Design Center in Seattle. With the Corps, Greg played a variety of roles on cleanup projects executed for the Department of Defense, Department of Energy, Environmental Protection Agency, Farm Service Agency, and other federal agencies. He graduated from the Corps' Leadership Development Program in 2000.

Greg began his career as a cooperative education student and assistant remedial project manager with the Environmental Protection Agency's Superfund Program in Region 10-Seattle where he worked on a variety of cleanups throughout Washington and Idaho.

Greg has worked on civilian and military sites during his career, with contaminants such as heavy metals, polychlorinated biphenyls, petroleum-oil-lubricants, asbestos, chlorinated solvents, wood treater chemicals including polynuclear aromatic hydrocarbons, explosives residues, chlorinated and phosphorus-based pesticides, dioxins/furans, radionuclides, seal blubber, and biohazards. Past projects include the optimization of a groundwater treatment plant and leading a treatability study on the use of constructed wetlands to remediate acid mine drainage. Greg led a multidisciplinary team's review of the design for a multibillion dollar nuclear waste remediation. Greg scoped the characterization of a 3,800 acre former Army training facility, provided life-cycle environmental engineering of a former pesticides disposal test facility using the Triad Approach, and managed the conceptual design of an in-situ thermal remediation system.

He holds a Bachelor of Science degree in chemical engineering from the University of Washington and is a licensed professional engineer, registered as qualified in environmental engineering by the State of Washington. Greg holds NOAA certification as a Contracting Officer's Technical Representative. Greg is also 40-hour HAZWOPER certified, a certified AHERA Building Inspector, and a certified Lead-Based Paint inspector by EPA Region 10 and the State of Washington.

JOHN FOX**Oak Ridge Institute for Science Education***Geographer, GIS/GPS Specialist*

John Fox began providing geographic information systems (GIS) support through ORISE for the Pribilof Project in January of 2002, while completing his Bachelor of Arts degree in geography, with an emphasis in GIS, at Western Washington University.

Prior to his work with NOAA he worked for five years with a landscape construction company as a heavy equipment operator. During this time, his duties also included surveys for cut/fill grading, supply and sub-contractor coordination, and backup project oversight.

After graduating in March 2002, he began working full time for the Pribilof Project and expanded his role on the project to include both GIS and global positioning system (GPS) duties. Along with providing GIS cartographic support, and data management in the office to assist with environmental restoration activities, he frequently travels to the Pribilof Islands to provide GPS survey support for site remediation activities. The past two years he has provided highly accurate and precise GPS elevation surveys on the groundwater well network on St. George, and St. Paul Island for the development of a groundwater flow model. In the past years, he has taken on a number of additional survey projects around the country, including work for the U.S. Army Corps of Engineers at the Wyckoff/Eagle Harbor Superfund Site on Bainbridge Island, Washington, bathymetric surveying of Bayou LaBranche in Louisiana, and a site characterization survey on Sledge Island, Alaska in coordination with the NOAA Facilities and Logistics Division. He has established survey control for the GPS base station operation on the Pribilof Islands, the Wyckoff-Eagle Harbor Superfund Site, and Bayou LaBranche. His professional experience also includes conducting soil analyses using thin layer chromatography and participating in several conferences pertaining to GIS/GPS.

He maintains a current 40 hr HAZWOPER certificate, as is a certified AHERA Building Inspector and a certified Lead-Based Paint inspector by EPA Region 10 and the State of Washington. He has also received training from ESRI cartographic seminars, and participated in a University of Washington credited extension program on remote sensing.